

-28-

**CLAIMS**

1. A system for exchanging medical data, the data exchange system comprising:
  - means for acquiring medical data;
  - means for handling medical data wherein medical data may be stored, analyzed, or displayed;
  - one or more web services for performing a data exchange function between the means for acquiring medical data and the means for handling medical data.
2. The system of claim 1, wherein one of the one or more web services is a translation web service.
3. The system of claim 2 wherein the translation web service includes an input method for receiving medical data in a first format and an output method for returning medical data to an invoking application in a second format.
4. The system of claim 1 wherein one of the one or more web services is an analysis web service.
5. The system of claim 4 wherein the analysis web service includes an analysis method for performing a requested data analysis function on the specified data and returning the analysis results to an invoking application.
6. The system of claim 1 wherein one of the one or more web services is a storage web service.
7. The system of claim 6 wherein the storage web service includes a method for writing data to a data storage system.

-29-

8. The system of claim 6 wherein the storage web service includes a method for retrieving data from a data storage system.
9. The system of claims 7 or 8, wherein the data storage system is any of a relational database system; a file system; an XML file system, or a medical device.
10. The system of claim 1 wherein one of the one or more web services is a multifunction web service.
11. The system of claim 10 wherein the multifunction web service invokes any of a translation web service, an analysis web service, and a storage web service.
12. The system of claim 11 wherein the multifunction web service is a data log service for informing a first data storage system of a new data set entered into a second data storage system.
13. The system of claim 12 wherein a new data set comprises a record of a monitoring session performed by a medical device.
14. The system of claim 11 wherein the multifunction web service is a session retrieval service for retrieving monitoring session data recorded by a medical device and stored in a data storage system.
15. The system of claim 11 wherein the multifunction web service is an enrollment web service for registering a patient or medical device record newly enrolled in a first data storage system into a second data storage system.

-30-

16. The system of claim 1 wherein the means for acquiring medical data is an external medical device having telemetric communication with an implantable medical device for receiving data from the implantable medical device and storing the data.

17. The system of claim 1 wherein the means for acquiring medical data is an external monitoring or therapy delivery device capable of acquiring and storing medical data.

18. The system of claim 1 wherein the means for acquiring medical data is an implantable medical device.

19. A system for exchanging medical data, the data exchange system comprising:

- a first means for handling medical data wherein medical data may be stored, analyzed or displayed and wherein first medical data handling means is provided with a communication connection;

- a second means for handling medical data wherein medical data may be stored, analyzed, or displayed and wherein second medical data handling means is provided with a communication connection;

- one or more web services for performing a data exchange function between the first and second data handling means via a communication connection.

20. A system for exchanging data between a medical device and a remote data handling system, the data exchange system comprising:

- a medical device capable of storing medical data and transferring the data via a communication connection;

- means for electronically storing data in a remote data handling system and for receiving data from the medical device via the communication connection;

-31-

one or more web services for performing a data exchange function wherein the web service may be invoked by an application running on the medical device or on the remote data handling system to allow data to be exchanged between the medical device and the remote data handling system.